

**CLAIMS**

I claim:

- 1        1. A method for performing design verification, the method  
2 comprising:
  - 3           specifying at least one object that represents at least one signal as a
  - 4           symbol in a design using a first programming interface call (PLI) command;
  - 5           and
  - 6           instructing a symbolic simulator with the first command to treat the
  - 7           at least one object as a symbol.
- 1        2. The method defined in Claim 1 further comprising:
  - 2           inserting the first command into a design specification; and
  - 3           inputting the design specification into the symbolic simulator.
- 1        3. The method defined in Claim 1 wherein the at least one object  
2 comprise a hardware description language object.
- 1        4. The method defined in Claim 1 wherein the at least one object  
2 comprises a Verilog object.
- 1        5. The method defined in Claim 1 wherein the first command  
2 comprises a Programming Language Interface (PLI).

1           6.       The method defined in Claim 1 wherein the at least one signal  
2       comprises an input.

1           7.       The method defined in Claim 1 further comprising:  
2       specifying a check using a second command, the check to perform a  
3       test to validate design functionality; and  
4       instructing the symbolic simulator using the second command to  
5       perform the test.

1           8.       The method defined in Claim 7 further comprising:  
2       inserting the first and second commands into a design specification;  
3       and  
4       inputting the design specification into the symbolic simulator.

1           9.       The method defined in Claim 7 wherein the second command  
2       comprises a PLI.

1           10.      The method defined in Claim 7 further comprising:  
2       instructing the symbolic simulator to generate a file with information  
3       to locate an identified fault.

1           11.      An article of manufacture having at least one recordable  
2       medium having stored thereon executable instructions which, when

3       executed by at least one processing device, cause the at least one processing  
4       device to:

5              specify at least one object that represents at least one signal as a  
6       symbol in a design using a first command; and

7              instruct a symbolic simulator with the first command to treat the at  
8       least one object as a symbol.

1       12.     The article of manufacture defined in Claim 11 further  
2       comprising executable instructions stored on the at least one recordable  
3       medium which, when executed by at least one processing device, cause the  
4       at least one processing device to:

5              insert the first command into a design specification; and  
6              input the design specification into the symbolic simulator.

1       13.     The article of manufacture defined in Claim 11 wherein the at  
2       least one object comprise a hardware description language object.

1       14.     The article of manufacture defined in Claim 11 wherein the at  
2       least one object comprises a Verilog object.

1       15.     The article of manufacture defined in Claim 11 wherein the  
2       first command comprises a Programming Language Interface (PLI).

1        16.    The article of manufacture defined in Claim 11 wherein the at  
2    least one signal comprises an input.

1        17.    The article of manufacture defined in Claim 11 further  
2    comprising executable instructions stored on the at least one recordable  
3    medium which, when executed by at least one processing device, cause the  
4    at least one processing device to:

5              specify a check using a second command, the check to perform a test  
6    to validate design functionality; and

7              instruct the symbolic simulator using the second command to  
8    perform the test.

1        18.    The article of manufacture defined in Claim 17 further  
2    comprising executable instructions stored on the at least one recordable  
3    medium which, when executed by at least one processing device, cause the  
4    at least one processing device to:

5              insert the first and second commands into a design specification; and  
6    input the design specification into the symbolic simulator.

1        19.    The article of manufacture defined in Claim 17 wherein the  
2    second command comprises a PLI.

1           20.     The article of manufacture defined in Claim 17 further  
2     comprising executable instructions stored on the at least one recordable  
3     medium which, when executed by at least one processing device, cause the  
4     at least one processing device to:  
5                 instruct the symbolic simulator to generate a file with information to  
6     locate an identified fault.